

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An electrical connector comprising:

~~a terminal fixed to a connector housing;~~

a conductor exposed from a covering ~~and having;~~

a connection portion ~~of the conductor~~ connected to a connection portion of ~~the a~~ terminal;

a connector housing receiving the terminal;

an impedance control means fixed on the connection portions of the conductor and the terminal; and

a second covering that covers a part of the covering, the impedance control means and a part of the connector housing, wherein

a foam element at a foam ratio selected to the impedance control means is a foam resin controlling an impedance in terms of a foam ratio that is selected so that an impedance of the connection portions substantially match the impedance of the connection portion with the covering of the conductor, located around respective connection portions of the conductor and the terminal.

2. (original): The electrical connector according to claim 1,

wherein the foam element includes a resin,

wherein impedance of the foam element is closer to impedance of the covering, compared with a non-foamed resin.

3. (original): The electrical connector according to claim 1,
wherein the foam element includes a foam resin.

4. (original): The electrical connector according to claim 1,
wherein the foam element functions as a capacitive capacitor.

5. (original): The electrical connector according to claim 1,
wherein respective connection portions of the conductor and the terminal are located in a cavity of the connector housing,
wherein the connector housing is made of a foamed resin.

6. (original): The electrical connector according to claim 1,
wherein the foam ratio of the foam element is greater than 0% and 80% or less.

7. (original): The electrical connector according to claim 1,
wherein the foam element has strength to maintain a structure thereof.

8. (currently amended): A method of fabricating an electrical connector, comprising:

connecting a connection portion of a terminal and a connection portion of a conductor exposed from a covering to each other;

receiving the terminal in a connector housing;

fixing impedance control means on the connection portions of the conductor and the terminal; and

covering a part of the covering, the impedance control means and a part of the connector housing with a second covering-and

covering respective connection portions of the terminal and the conductor with a foam element at a foam ratio selected to substantially match the impedance of the connection portion with the covering of the conductor;

wherein the impedance control means is a foam resin controlling an impedance in terms of a foam ratio that is selected so that an impedance of the connection portions substantially match the impedance of the covering of the conductor.

9. (original): The method of fabricating an electrical connector according to claim 8, wherein the foam element is controlled to be approximate in impedance to the covering.

10. (original): The method of fabricating an electrical connector according to claim 8, wherein the foam element is molded to cover respective connection portions.

11. (original): The method of fabricating an electrical connector according to claim 8,

wherein the foam element is formed into a predetermined shape to be fitted to respective connection portions.

12. (original): The method of fabricating an electrical connector according to claim 8, wherein the foam element is formed as a tape to be wound around respective connection portions.

13. (currently amended): An electrical connector comprising:
a cable comprising:
an electrical wire including a conductor exposed from a first covering;
a drain wire arrayed parallel to the electric wire; and
a jacket holding the electric wire and the drain wire;
a connection terminal having a connection portion connected to an end of the conductor;
an earth terminal having a connection portion connected to an end of the drain wire;
a connector housing receiving the connection terminal and the earth terminal; and
a second covering located around ~~the~~ foam resin, wherein
thea foam resin is configured to control an impedance in terms of a foam ratio that is
selected so that an impedance of the connection portion substantially matches an impedance of a
the first covering~~having a foam ratio selected to substantially match the impedance of the~~
~~connection portion with the first and second coverings of the conductor, located around the end~~

~~of the conductor, the connection portion of the connection terminal, the end of the drain wire and the connection portion of the earth terminal.~~

14. (currently amended): A cable comprising:

an electric wire having a conductor exposed from a covering.

a connection portion of the electric wire connected to a connection portion of a
~~terminal~~connector including a terminal having a connection portion connected to a connection
~~portion of the conductor and fixed to a connector housing;~~

a connector housing receiving the terminal;

a foam element fixed on the connection portions of the electric wire and the terminal; and

a second covering that covers a part of the covering, the foam element and a part of the
connector housing.

wherein the foam element is a foam resin controlling an impedance in terms of a foam
ratio that is selected so that an impedance of the connection portions substantially match the
impedance of the covering of the electric wire

~~a foam element at a foam ratio selected to substantially match the impedance of the~~
~~connection portion with the covering of the conductor, located around respective connection~~
~~portions of the conductor and the terminal.~~

15. (currently amended): A connector for a signal transmission cable, comprising:

a connector housing;

a terminal fixed to the connector housing;

a cable conductor exposed from a covering and electrically connected to the terminal by welding within the connector housing;

an impedance control means fixed on a connection of the terminal and the cable conductor; and

a second covering that covers a part of the covering, the impedance control means and a part of the connector housing,

wherein impedance control means is a foam resin controlling an impedance in terms of a foam ratio that is selected so that an impedance of the connection of the terminal and the cable conductor substantially match the impedance of the covering of the cable conductor

~~a foam element having a foam ratio selected to substantially match the impedance of connection portions of the conductor with the covering of the conductor, the covering connection portions of the terminal and the cable conductor within the connector housing.~~

16. (original): The connector for a signal transmission cable according to claim 15, wherein the connection portions include a molten alloy layer.

17. (currently amended): The method of fabricating a connector for a signal transmission cable, comprising:

welding a terminal and a cable conductor having a covering to make a connection
portion each other for connection;

inserting the terminal in a housing;
preparing a foamable resin;
locating connection portions of the terminal and the cable conductor in a die;
feeding the foamable resin into the die for extrusion to cover the connection
~~portion~~~~connected terminal and the conductor~~ with a foam element;
forming a second covering that covers a part of the covering, the foamable resin and a
part of the housing at a foam ratio selected to substantially match the impedance of the
connection portions with the covering of the conductor;
molding a resin for the connector housing around the terminal, the foam element, and the
cable conductor exposed from the covering, thus to form a connector housing in a predetermined
shape,
wherein foamable resin is configured to control an impedance in terms of a foam ratio
that is selected so that an impedance of the connection portions of the terminal and the cable
conductor substantially match the impedance of the covering of the cable conductor.

18. (currently amended): A method of fabricating a connector for a signal transmission cable, comprising:

welding a terminal and a cable conductor to each other for connection;
forming a pair of foam resin covering members preliminarily formed into shapes which conform to an upper half shape and a lower half shape of connection portions of the terminal and the cable conductor;

fitting said pair of covering members around the connection portions of the terminal and the cable conductor; and

molding a resin for a connector housing around the terminal, the covering members, and the cable conductor exposed from a covering, thus to form the connector housing in a predetermined shape,

wherein the resin is a foam resin configured to control an impedance in terms of a foam ratio that is selected so that an impedance of the connection of the terminal and the cable conductor substantially match the impedance of the pair of covering members.

19. (currently amended): A method of fabricating a connector for a signal transmission cable, comprising:

welding a terminal and a cable conductor for connection;

preparing a foam resin tape;

winding the foam resin tape a predetermined number of times around connection portions of the terminal and the cable conductor to cover the connection portions;

molding a resin for a connector housing around the terminal, the foam resin tape, and the cable conductor exposed from a covering, thus to form a connector housing in a predetermined shape,

wherein the foam resin tape is configured to control an impedance in terms of a foam ratio that is selected so that an impedance of the connection of the terminal and the cable conductor substantially match the impedance of the covering formed by the resin~~has a~~

~~predetermined foam ratio selected to substantially match the impedance of the connection portions with the covering of the conductor.~~

20. (previously presented): The method of fabricating a connector for a signal transmission cable, according to claim 18, wherein the foam resin has a predetermined foam ratio selected to substantially match the impedance of the connection portions with a covering of the cable conductor.

21. (new): An electrical connector according to claim 1, wherein the foam resin is fills a surrounding space defined by the connection portions and the second covering.